Meningococcal Disease

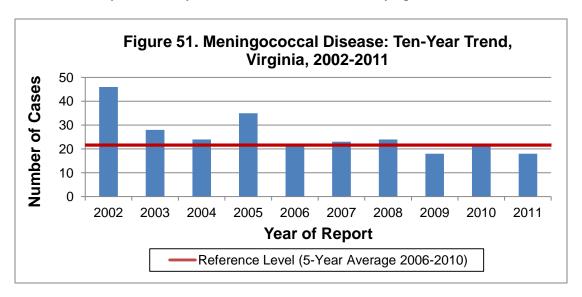
Agent: Neisseria meningitidis (bacteria)

<u>Mode of Transmission</u>: Transmission occurs through contact with respiratory droplets from the nose or throat of infected people (e.g., through coughing or kissing).

<u>Signs/Symptoms</u>: Sudden onset of fever, headache, stiff neck, vomiting, and sensitivity to light. A rash may also be present.

<u>Prevention</u>: Vaccination with recommended meningococcal vaccine. The three most commonly occurring serogroups of meningococcal bacteria in the U.S. are B, C, and Y. There is currently no licensed vaccine that protects against serogroup B in the U.S.

Other Important Information: Crowding, exposure to tobacco smoke, and coexisting respiratory tract infections increase the risk of disease. Five to ten percent of people carry *N. meningitidis* in their nose without having any symptoms of disease; those who develop disease are usually infected by a carrier who does not have symptoms.



During 2011, 18 cases of meningococcal disease were reported in Virginia. This represents a 14% decrease from the 21 cases reported in 2010, and a 17% decrease from the five-year average of 21.6 cases per year (Figure 51).

The 10-19 year age group had the highest number of cases and the highest incidence rate (6 cases, 0.6 per 100,000). No cases were reported among the <1 year, 1-9 year or 20-29 year age groups. Incidence rates among the remaining age groups ranged from 0.2 to 0.3 per 100,000. Rates were similar for the white and black populations (0.2 and 0.3 per 100,000, respectively). Incidence among males and females was the same (0.2 per 100,000). By region, the highest incidence rate was observed in the northwest (0.4 per 100,000), with rates in the other regions ranging from 0 to 0.3 per 100,000. The largest proportion of cases (39%) occurred in the first quarter of the year, and the smallest proportion (6%) occurred during the second quarter.

Of the fifteen cases for which a serogroup was identified, nine were group B, and six were group Y (Figure 52). Of the six cases reported with serogroup Y, there was no indication

of vaccination being administered for this condition. Among 2011 cases, two deaths were reported in individuals whose infections developed into meningitis. The fatalities occurred in two females, one in the 20-29 year age group from the northern region and the other in the 50-59 year age group from the southwest region. No outbreaks attributed to meningococcal disease were reported in 2011.

